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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/822,335	04/02/2001	Paul Enquist	205109US20	9790

22850 7590 05/17/2002

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EXAMINER

NGO, NGAN V

ART UNIT	PAPER NUMBER
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2814

DATE MAILED: 05/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/822,335

Applicant(s)

ENQUIST, PAUL

Examiner

Ngan Ngo

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-- Th MAILING DATE of this communication app ars on the cover sh et with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 40-76 is/are pending in the application.
- 4a) Of the above claim(s) 48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 40-47 and 49-76 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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The amendment filed March 18, 2002 has been entered and made of record as paper no. 5.

Applicant's election with traverse of Figures 6 and 7 (claims 40-47 and 49-76) in Paper No. 5 is acknowledged. The traversal is on the ground(s) that "if a search and examination of an entire application can be made without a serious burden, the examiner must examine it on the merits". This is not found persuasive because it is a serious burden for the examiner to examine more than one invention in the same application. The inventions might be related to each other but the field of search are not co-extensive.

The requirement is still deemed proper and is therefore made FINAL.

Claim 51 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 51 is not understood because the elected species shown in figures 6 and 7 does not disclose the heterojunction field effect device. If figures 6 and 7 are a field effect device, where is the gate electrode?

Claims 40-47 and 49-76 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Enquist et al (US-5,318,916, cited by Applicant).

Enquist discloses a semiconductor device comprising a first active region (70), a second active region (101), a third active region (12), first, second, and third contacts

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(90, 31, and 80). Enquist teaches that the first and second active regions are symmetrically self-aligned.

Claims 40-47 and 49-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nii (US-5,247,192).

Nii discloses a semiconductor device comprising a first active region (2), a second active region (4), a third active region (4), and first, second and third contacts (1, 9, and 6). It would have been obvious that the first active region and second active region are symmetrically aligned because the opening in layers 5, 6, and 7 are formed by the same mask. No patentable weight is given to the term "self-aligned" because it is a process limitation. A "product by process" claim is directed to the product per se, no matter how actually made, *In re Hirao*, 190 USPQ 15 at 17(footnote 3). See also *In re Brown*, 173 USPQ 685; *In re Luck*, 177 USPQ 523; *In re Fessmann*, 180 USPQ 324; *In re Avery*, 186 USPQ 161; *In re Wertheim*, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); *In re Marosi et al*, 218 USPQ 289; and particularly *In re Thorpe*, 227 USPQ 964, all of which make it clear that it is the patentability of the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Note that applicant has the burden of proof in such cases, as the above caselaw makes clear.

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Some of the publications cited by Applicant are not considered because the parent application is not available to the Examiner. To ensure a proper consideration, copies of the publications are requested upon response to this office action.

The other reference is cited to show other structure pertinent to Applicant's disclosure.

Any inquiry concerning this communication should be directed to Examiner Ngan Ngo at telephone number (703) 308-4938. The fax number for the Art unit is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Handwritten signature of Ngan Van Ngo, consisting of stylized initials and a checkmark.

Ngan Van Ngo  
Primary Examiner

Ngan Ngo

May 14, 2002